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## Engines reinstalled on Atlantis, wiring done on Endeavour, Discovery checked out



◆ **Shuttle Update:** **Atlantis'** three main engines were removed last week for flow liner contamination inspections, which are now complete. A small piece of RepliSet found in the engine No. 2 flow liner was removed. The silicon rubber RepliSet is used in making 3-D impressions that help to detect cracks in the main propulsion system fuel line flow liners. All three engines were reinstalled.

Workers in Orbiter Processing Facility bay 2 are installing the orbiter engine heat shields on **Endeavour** and have completed the engine interface connections. Technicians are also working on modifications to the orbiter's engine cut-off sensor wiring. This work involves rerouting new wires and installing new resistors. The crew hatch carrier panel fit check was successfully completed last week. Checkout of the orbiter's three inertial measurement units is complete. These units are part of the orbiter's navigation system. Nose landing gear door rigging continues, and orbiter aft closeout work began last week. Endeavour will fly on mission STS-118 in August.

In Orbiter Processing Facility bay No. 3, workers have completed verifying the forward reaction control system interface connections on **Discovery**. Checkout of the "station to shuttle power transfer system" is under way. Technicians are also working on modifications to the orbiter's engine cutoff sensor wiring. This work involves rerouting new wires and installing new resistors. APU lube oil servicing is complete, and functional testing of the atmospheric revitalization

pressure control system, part of the orbiter's life support system, is in progress. Discovery will fly on mission STS-120 in the fall.

◆ **ISS Update:** Last week included work on a wide array of science experiments. Flight Engineer Suni Williams completed the fifth run of the elastic memory composite hinge experiment. The experiment studies the performance of a new hinge composite in space. Williams also did a test run of a hand-held device for rapid detection of biological and chemical substances onboard the station. This study is meant to provide an early warning system to protect the health and safety of station crew members. Williams also completed annual recertification of the microgravity science glovebox and performed a checkout of the cardiac defibrillator.

Flight Engineer Oleg Kotov did maintenance work in the Zarya module and tested the circuits of a temperature sensor on one of the batteries. He also conducted the periodic collection of air readings in the station with the Russian real-time harmful contaminant gas analyzer system.

Other hardware and maintenance tasks included replacing a common cabin air analyzer, monitoring the sound level in the Russian service module and in the U.S. Destiny Laboratory, and charging U.S. spacesuit batteries.

Crew members wrapped up the week by replacing a heat exchanger in the Zvezda Service Module and swapped out computers used in the U.S. lab racks.

■ **Recycle Phone Books** — The new BellSouth Telephone Books are being

## Expedition 15 flight engineers work on experiments, station maintenance

distributed throughout KSC. Please do not put your outdated telephone books in the trash -- recycle them! Through May 30, all personnel can participate in the centerwide telephone book recycling program by placing your outdated BellSouth (only) telephone books in your office's outgoing mailbox for pick-up by the mail carriers. If you have more outdated telephone books than your outgoing mailbox can hold, please place them in a neat stack on the floor, table or desk next to your mailbox.

■ **Diversity Event Slogan Contest** — The Office of Diversity and Equal Opportunity is preparing for its fourth Annual Diversity Event, to be held in September, with a slogan contest open to NASA and contractor personnel at KSC. Entries should represent KSC's commitment to diversity, respect and inclusion for all, and a discrimination-free workplace. The staff will select the slogan which best represents these values. Please e-mail your slogan to [KSC-Diversity@nasa.gov](mailto:KSC-Diversity@nasa.gov) by close of business May 31; include your name, mail code and phone number, and put the words SLOGAN CONTEST in the subject line. The selected slogan will be announced in June and will be used as this year's diversity event theme, reflected in all media materials advertising the event.

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